

# Work Order ID 98219

March-11-13 7:37:05 AM

\*98219\*

RELIMINARY ISSUE

Page 1

Item ID: D4789-3  
Revision ID: PRELIM  
Item Name: Lower Clevis

Accept

\*N9000040100\*

Setup Start \*NS1\*

Stop \*NS2\*

Start Date: 3/11/13 Start Qty: 2.00 \*2\*  
Required Date: 3/25/13 Req'd Qty: 2.00 \*2\*

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: ML5 Date: 13-03-11

Tooling:

Date:

Run Start \*NR1\*

QC: Date: SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/ Work Center ID	Opération Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D4789

PA3

100

0.00

\*100\*

BAND SAW

Bandsaw

Memo

0.00

Jeaspa Bandsaw

Cut blank: 3.250" long

cut 13/03/12

2

110

0.00

\*110\*

HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

1- Machine as per Folio FB171

cut 13/03/13

2

FOLIO REV: 94  
DWG REV: PA3

- Deburr

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td style="width: 25%;">Skid-tube <input type="checkbox"/></td> <td style="width: 25%;">Crosstube <input type="checkbox"/></td> <td style="width: 25%;">Water Jet <input type="checkbox"/></td> <td style="width: 25%;">Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

### FAULT CATEGORY

Landing Gear	General	Other
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Misread
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Offset
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Out of Calibration
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Sequence
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Outside Dimensions
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	
		<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other

# Work Order ID 98219

March-11-13 7:37:05 AM

\*98219\*

Page 2

Item ID: D4789-3  
Revision ID: PRELIM  
Item Name: Lower Clevis

Accept

\*N900040100\*

Setup Start \*NS1\*

Stop \*NS2\*

Start Date: 3/11/13 Start Qty: 2.00 \*2\*  
Required Date: 3/25/13 Req'd Qty: 2.00 \*2\*

Cust Item ID:  
Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \*NR1\*

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC2- Inspect parts off machine FAI/FAIB  Memo	0.00  0.00		OK 13/03/13		2			
130 *130* QC Quality Control	QC8- Inspect parts - second check  Memo	0.00  0.00		DAS 27 13 3 13					Inspected as per DWS PAB
140 *140* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1  Memo	0.00  0.00		N/A 4.11 13-03-14					

POSITIVE RECALL

EFFECTIVE 13-03-11 AUTH LL

RELEASED \_\_\_\_\_ DATE \_\_\_\_\_

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

**FAULT CATEGORY**

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions
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<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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# Work Order ID 98219

March-11-13 7:37:05 AM

**\*98219\***

Page 3

Item ID: D4789-3  
Revision ID: PRELIM  
Item Name: Lower Clevis

Accept

**\*N9000040100\***

Setup Start **\*NS1\***  
Stop **\*NS2\***

Start Date: 3/11/13 Start Qty: 2.00 **\*2\***  
Required Date: 3/25/13 Req'd Qty: 2.00 **\*2\***

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***  
Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 <b>*150*</b> QC Quality Control	QC7-Inspect Chemical Conversion Coat  Memo	0.00  0.00		N/A					
170 <b>*170*</b> Packaging Packaging	Identify as per dwg & Stock Location: _____  Memo	0.00  0.00							
180 <b>*180*</b> QC Quality Control	QC21- Final Inspection - Work Order Release  Memo	0.00  0.00							

W 130320  
RD 4440

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

**FAULT CATEGORY**

Landing Gear	General	Other
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabelled
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized
		<input type="checkbox"/> Over/Under tolerance
		<input type="checkbox"/> Part Incorrect
		<input type="checkbox"/> Part Lost/Missing
		<input type="checkbox"/> Part Moved
		<input type="checkbox"/> Positioned Wrong
		<input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced
		<input type="checkbox"/> Temperature/Cure
		<input type="checkbox"/> Weld
		<input type="checkbox"/> Wrong Stock Pulled
		<input type="checkbox"/> Other

# Picklist Print

March-11-13 7:37:09 AM

Work Order ID: 98219

\*98219\*

Parent Item: D4789-3

\*D4789-3\*

Parent Item Name: Lower Clevis

Start Date: 3/11/13

Required Date: 3/25/13

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP REV:A NEW ISSUE 13-03-08 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B2.000X04.00 0		Purchased	No				f	18.3300		0.568421			

**\*M6061T6B2 000X04 000\***

6061T6 Bar 2.00 x 4.00

\*\*

Location

Loc Qty

Loc Code

MAT009

18.33

111447

18.33

57 on 13/03/12

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions
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<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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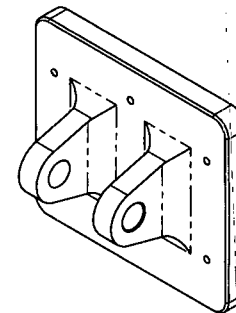
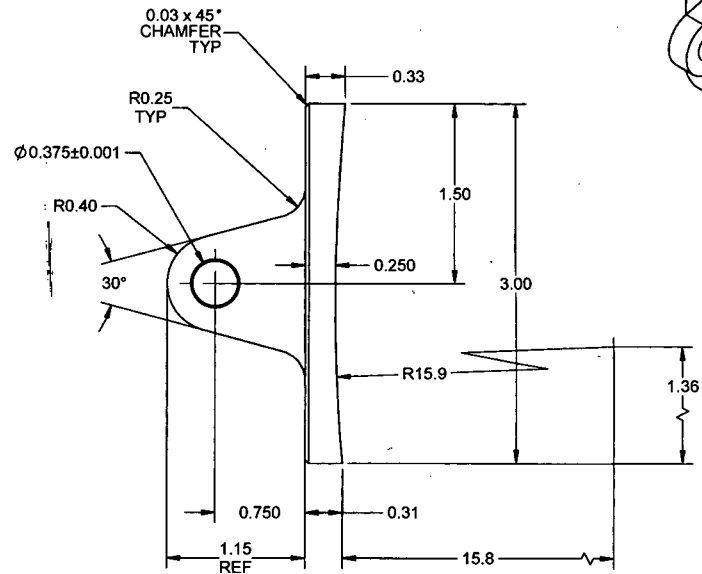
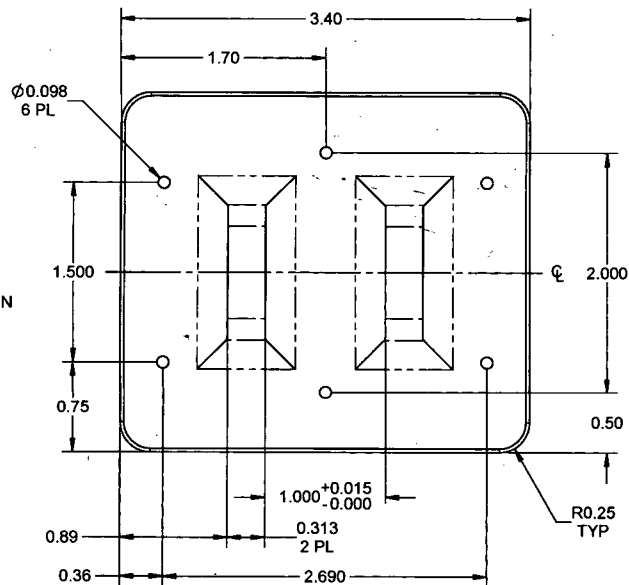
8 7 6 5 4 3 2 1

D

C

B

A



# **D4789-3 LOWER CLEVIS**

**PRELIMINARY ISSUE**

**13.03.02**

## **NOTES:**

- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR  
PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221  
REF DART SPEC M6061B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.33 lbs

DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	<i>SC</i>	DRAWING NO. <b>D4789</b>	REV. PA3
MFG. APPR.		SHEET 2 OF 3	
APPROVED		TITLE <b>CLEVIS</b>	SCALE NTS
DE APPR.		COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DATE	<b>13.03.02</b>		

8 7 6 5 4 3 2 1

DART AEROSPACE LTD		Work Order: 98219
Description: LOWER CLEVIS		Part Number: D4789-3
Inspection Dwg: D4789 Rev: PA3		Page 1 of 1

### FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
3.40	$\pm .030$	3.402	—		Vern	971-D6
.313	$\pm .010$	.311	—		"	"
1.000	$\pm .005$	1.002	—		"	"
R.25	$\pm .030$	R.250	—		R-G	
R.25	$\pm .030$	R.250	—		"	
.03 X 45°	$\pm .030 \times \pm 1/2^\circ$	.033 X 45°	—		Vern	ML-D6
.33	$\pm .030$	.332	—		"	"
1.50	$\pm .030$	1.501	—		H-G	310D6
.250	$\pm .010$	.251	—		Vern	ML-D6
3.00	$\pm .030$	3.001	—		"	"
.31	$\pm .030$	.312	—		"	"
1.15	$\pm .030$	1.150	—		H-G	310D6
.750	$\pm .005$	.750	—		"	"
Ø.375	$\pm .001$	Ø.375	—		Micr	ML-D1
R.40	$\pm .030$	R.40	—		R-G	
30°	$\pm 1/2^\circ$	30°	—		C-Square	

Measured by: <i>QJ</i>	Audited by: <i>DAJ</i> 27	Preliminary Approval:
Date: 13/03/13	Date: 13/3/13	Date:

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

*10.04.15*

## Receiving Report

Date: 7/4/16

Batch No: 7111447

Supplier: MAGNA

Dart P/O: 8535

Packing Slip: Yes ☒ No ☐  
 Invoice: Yes ☐ No ☒  
 Receipt: Cash ☐ Cr ☒

Release Note Attached: Yes ☒ No ☐ N/A ☐  
 Waybill Attached: Yes ☐ No ☒ N/A ☐  
 Shipment Complete: Yes ☒ No ☐ N/A ☐  
 QCS Inspection: ☒ N/A ☐  
 Work Order: 1346709 09/04/17 N/A ☐

### Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments
M414NB	625X0420	24	0	0	24	
M304TR	625W091	100	0	0	100	
M7075T6	B100-6050	12	0	0	12	

M7075T73 R100

Initials of receiver (if shipment OK)

Level 12

Production/Admin:

Date

Received/Costing

Initial

09/04/17

RCP 10744

09

Location

# Dart Aerospace Ltd

Dart Aerospace Ltd  
1270 Aberdeen St  
Hawksbury, Ontario K6A 1K7  
Phone: (613) 632-3336  
Fax: (613) 632-4443

## Receiving Slip

Date Apr 17, 2009	Page 1
Receipt Number RCP00010744	

### Purchase From:

Magna Stainless  
5775 rue Kieran  
St Laurent, Quebec H4S 0A3  
Canada

### Ship To:

Main Finished Goods Location  
Dart Aerospace Ltd  
1270 Aberdeen St  
Hawksbury, Ontario K6A 1K7

Reference	Description	Contact	Vendor Number	PO Number
			VC-MAG002	PO00008535

Vendor Item Number	Item Number	Description	Qty. Received	UOM	Unit Cost	Extended Cost	Arrival Date
	D6207P	Angle Extrusion 1x1x.12 B46909 MINIMUM YIELD TENSILE STRENGTH = 35 KSI MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI MATERIAL: 6061-T6 OR 6511 (QQ-A-200/8) ANGLE EXTRUSION: 1" X 1" X .125" AS PER DWG D6207 REV. A B/N46909	60.0000	f	0.650000	39.00	Apr 17, 2009
	M6061T6B2000X0	6061T6 Bar 2.00 x 4.00 4116 OR PER AMS-QQ-A-200/8 OR AMS 4160 BAR PER AMS-QQ-A-225/8 OR AMS 4117/4128/4115 MATERIAL: 6061-T6 OR 6061-T651/T6510/T6511/T62 B/N111447	20.0000	f	20.100000	402.00	Apr 17, 2009

Comments:



# Magna Stainless

5775 Kieran St, Saint-Laurent QC H4S 0A3  
Phone: (514) 339-1211 Watts: 1-800-363-6646 Fax: (514) 339-1105

## INVOICE

Pg 1 of 1 I009679

SOLD TO:

DART AEROSPACE LTD  
1270 ABERDEEN STREET  
HAWKESBURY , ON  
K6A 1K7

RECEIVED APR 23 2009

### SHIP TO:

DART AEROSPACE LTD  
1270 ABERDEEN STREET  
HAWKESBURY , ON  
K6A 1K7

MTR:Y

INVOICE DATE:	04/16/09
ORDER DATE:	04/09/09
SHIP DATE:	04/16/09
ORDER NUMBER:	W010589
PURCHASE ORDER:	8535

Currency	Sales Person	Ship Via	F.O.B.	Terms
CANADIAN DOLLARS	ERYCK BLAIS	NIR-R-557065-1	PREPAID	NET 30 DAYS

Ln.	Back Ordered	Ordered	Unit	Description	Shipped	Price Per	Value
		3	PC	ALUMINUM ANGLES AAN 6061 T6 1" x 1" x 1/8" x R/L L020459 20' 3 PC/18 LB MUST USE HT: 5850	3 PC	13.00	39.00
		1	PC	ALUMINUM FLATS AFL 6061 T6 2" x 4" x R/L L025024 20' 1 PC/192 LB MUST USE HT: 0724302	1 PC	402.00	402.00

04/17/09 10:50:50

Merchandise:	441.00
Surcharges:	
No Tax Costs:	
GST	22.
Total Due:	463.05

Title to the goods sent out on this invoice remains with Magna Stainless Div of CSM ULC until such time as this invoice has been paid in full. Unless otherwise noted terms are 30 days. Interest accrues on all overdue accounts at the rate of 1.5% per month compounded monthly.

Q.S.T. # 1243236471  
G.S.T. # 881565899 RT0001



# Magna Stainless

5775 Kieran St, Saint-Laurent, Quebec H4S 0A3  
Phone: (514) 339-1211 Watts: 1-800-363-6646 Fax: (514) 339-1105

## PACKING LIST

I009679

Page: 1 of 1

SOLD TO:  
DART AEROSPACE LTD  
1270 ABERDEEN STREET

SHIP TO:  
DART AEROSPACE LTD  
1270 ABERDEEN STREET

HAWKESBURY, ON  
K6A 1K7  
Contact: CHANTAL

HAWKESBURY, ON  
K6A 1K7  
Ship Terms: PREPAID

MTR: Y

SPECIAL INSTRUCTIONS

Currency		Sales Person	Customer Phone	Customer Fax	Customer PO		
CANADIAN DOLLARS		ERYCK BLAIS	(613) 632-5200	(613) 632-1053	8535		
Sales Order	Terms		Ship Via		Date Ordered	Date Required	Date Shipped
W010589	NET 30 DAYS		NIR:R-557065-1		04/09/09	04/16/09	04/16/09

Ordered	Back Ordered	Unit	Description	Bundle #	Heat #	Shipped
3		PC	ALUMINUM ANGLES AAN 6061 T6 1" x 1" x 1/8" x R/L ✓ 20' 18 LB / 3 PC MUST USE HT: 5850	L020459	5850	3
1		PC	ALUMINUM FLATS AFL 6061 T6 2" x 4" x R/L ✓ 20' 192 LB / 1 PC MUST USE HT: 0724302	L025024	0724302	1
Bundles: 1			Total Weight:			210 LB

Received by:

Date:

Signature:

# DART

## Purchase Order

Date Apr 08, 2009	Page 1
Purchase Order Number PO00008535	

Dart Aerospace Ltd  
1270 Aberdeen St  
Hawksbury, Ontario K6A 1K7  
Phone: (613)632-9577  
Fax: (613)632-1053

**FAKED**  
06091046

**Vendor Address:**

Magna Stainless  
5775 rue Kieran  
St Laurent, Quebec H4S 0A3  
Canada  
Phone (514) 339-1211  
Fax (514) 339-1105

**Ship To:**

Main Finished Goods Location  
Dart Aerospace Ltd  
1270 Aberdeen St  
Hawksbury, Ontario K6A 1K7

Reference	Contact	Vendor Number	PO Date	Terms	Ship Via	Expected Arrival
		VC-MAG002	Apr 08, 2009	N30	yours	Apr 16, 2009

Qty. Ordered	Item Number	Description	Expected Arrival	Drop-Ship	Unit Cost	UOM	Extended Price
✓ 60.0000 16/9/11	D6207P	Angle Extrusion 1x1x.125 Comments: AS PER DWG D6207 REV. A ANGLE EXTRUSION: 1" X 1" X .125" MATERIAL: 6061-T6 OR 6511 (QQ-A-200/8) MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI MINIMUM YIELD TENSILE STRENGTH = 35 KSI B46909	16/04/2009	No	0.650000	f	39.00
24.0000	M4140NB0625X0400	4140 Steel Bar .625 x 4.00 Comments: MATERIAL: 4140 AS PER CF LP ANN BAR PER ASTM A 331 / A 108	16/04/2009	No	29.166666	f	700.00
100.0000	M304TR0675W091	304 RD Tube .675 x .091 Comments: MATERIAL: AISI 304/316 SS SEAMLESS ROUND TUBING OR SCHEDULE 40 SEAMLESS	16/04/2009	No	6.750000	f	675.00
✓ 20.0000 16/9/11	M6061T6B2000X040	6061T6 Bar 2.00 x 4.00 Comments: MATERIAL: 6061-T6 OR 6061-T651/T6510/T6511/T62 BAR PER AMS-QQ-A-225/8 OR AMS 4117/4128/4115 4116 OR PER AMS-QQ-A-200/8 OR AMS 4160	16/04/2009	No	20.100000	f	402.00
12.0000	M7075T6B1500X150	7075 T6 BAR 1.500 x 1.5 Comments: MATERIAL: 7075-T6 OR T651/T6510/T6511/T62 ALUMINUM BAR PER AMS-QQ-A-225/9 OR AMS 4122/4123/4186/4187 OR PER AMS-QQ-A-200/11	16/04/2009	No	16.250000	f	195.00
24.0000	M7075T73R1000	7075-T73 Rd Bar 1.00 Comments: MATERIAL: 7075-T6 OR T651/T6510/T6511/T652 OR T62 ROUND BAR PER AMS-QQ-A-225/9 OR AMS 4122	16/04/2009	No	9.166666	f	220.00

**MATERIAL CERTIFICATION  
REQ'D UPON DELIVERY**

Continued on next page...

## Material Test Report

Customer Ship To:

Magna Stainless Inc.  
5775 Kieran St.

St-Laurent

QB H4S 0A3

Our Order: 358672 - 1

Your PO # PO02280

Part # 05666-000-240

Die: ES05666

Description: 1.000 x 1000 x .125

Alloy Temper 6061 T6

Print Date: 12/23/2008

### Chemical Properties

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	others each	others total	Al
0.40-0.8	0.7 max	0.15-.40	0.15 max	0.8-1.2	0.04-0.35	0.25 max	0.15	0.05	0.15	remain

Sorbiliz

### Mechanical Properties

#### Strength ksi

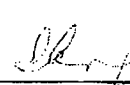
Test ID	Test Date	CastNum	Ultimate	Yield (2% Offset)	Elongation (2" gage length)
115262	12/23/08	5850	43.05	39.27	8.2

Applicable Specifications: ASTM B221-06 ASTM B308-02 ASTM B429 QQA200/8 QQA200/16

Can Art Aluminum Extrusion Inc. certifies that materials shipped under this order have been inspected and tested in accordance with Aluminum Association and agreed upon customer specifications. Can Art assumes no liability for additional costs which may be incurred during the customer's manufacture and sale of its products, and is subject only to the replacement of any materials not within agreed upon specifications provided written notification is received by Can Art within 30 days from the date of shipment.

Doug Barnes - Tensile Testing

Authorized

  
Evan Eng, Quality Assurance Mgr.

NO 20459



# PANASIA ALUMINIUM (CHINA) LIMITED

## Aluminium Mill Certificate

Cert. No.: PAAV-MC0808005

CUSTOMER: ASA Alloys Inc

PO No: 072216-BB

Contract No.: NIL

Alloy & Temper: 6061-T6511

Standards: ASTM-B221

Container No: ZCS09009360

Date of shipment: 2008.08.08

QQA-200/8

### Chemical Composition (%)

Heat No.	Si	Mg	Fe	Cu	Mn	Zn	Cr	Ti	Al
Standard	0.40-0.80	0.80-1.20	0.7max	0.15-0.40	0.15max	0.25max	0.04-0.35	0.15max	Rem.
20080723201	0.673	0.871	0.256	0.193	0.038	0.035	0.095	0.019	Rem.
20080725301	0.671	0.872	0.254	0.196	0.037	0.031	0.091	0.017	Rem.
20080728301	0.675	0.863	0.253	0.194	0.034	0.033	0.092	0.016	Rem.
20080724302	0.672	0.869	0.258	0.197	0.035	0.034	0.094	0.018	Rem.
20080724401	0.670	0.864	0.259	0.192	0.033	0.032	0.093	0.012	Rem.
20080711302	0.677	0.870	0.252	0.196	0.036	0.030	0.096	0.018	Rem.

### Tensile Test Result

Heat No.	Die No.	Customer part No.	Description	Tensile Strength		Yield Strength		Elongation
				N/mm <sup>2</sup>	Ksi	N/mm <sup>2</sup>	Ksi	
20080723201	T10008		✓ 1 x 0.095 Sq Tube Sq. Corner	295	43	265	39	12.3
20080725301	F10000044		✓ 3/8 x 3 Flat bar Sharp Corner	295	43	260	38	12.1
20080725301	F10030		✓ 1 x 3 Flat bar Sharp Corner	285	42	260	38	12.0
20080724302	F10000087		✓ 2 x 4 Flat bar Sharp Corner	290	42	270	39	12.4
20080724401	T10039		✓ 3/4 x 120 Sq Tube Sq. Corner	290	42	270	39	12.2
20080711302	T10026		✓ 1 x 0.125 Sq Tube Sq. Corner	285	42	265	39	12.5

### Hardness Test Result

Section No.	HRE	Webster	Other Remarks
T10008	91	15.3	
F10000044	91	15.6	
F10030	90	15.3	
F10000087	90	15.3	
T10039	92	15.9	
T10026	92	15.9	

The above result was done on testing samples and the mill shall guarantee the same quality for the same batch of products. It is certified that this material conforms in all respects to the requirements of the above standards latest revision.

QC: Xiaotuan Zhang

Checked By: Junxian Luo



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66744  
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